

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY



(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

REC'D 20 OCT 2005

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Applicant's or agent's file reference 1.090.003 WO		FOR FURTHER ACTION		See Form PCT/PEA/416
International application No. PCT/NL2004/000485		International filing date (day/month/year) 06.07.2004		Priority date (day/month/year) 07.07.2003
International Patent Classification (IPC) or national classification and IPC A61G5/04				
Applicant INDES HOLDING B.V. ET AL.				
<p>1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of 5 sheets, including this cover sheet.</p> <p>3. This report is also accompanied by ANNEXES, comprising:</p> <p>a. <input checked="" type="checkbox"/> sent to the applicant and to the International Bureau a total of 2 sheets, as follows:</p> <p><input checked="" type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).</p> <p><input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.</p> <p>b. <input type="checkbox"/> (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) , containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).</p>				
<p>4. This report contains indications relating to the following items:</p> <p><input checked="" type="checkbox"/> Box No. I Basis of the opinion</p> <p><input type="checkbox"/> Box No. II Priority</p> <p><input type="checkbox"/> Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</p> <p><input type="checkbox"/> Box No. IV Lack of unity of invention</p> <p><input checked="" type="checkbox"/> Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</p> <p><input type="checkbox"/> Box No. VI Certain documents cited</p> <p><input checked="" type="checkbox"/> Box No. VII Certain defects in the international application</p> <p><input checked="" type="checkbox"/> Box No. VIII Certain observations on the international application</p>				
Date of submission of the demand 23.02.2005		Date of completion of this report 21.10.2005		
Name and mailing address of the International preliminary examining authority:  European Patent Office - P.B. 5818 Patentlaan 2 NL-2280 HV Rijswijk - Pays Bas Tel. +31 70 340 - 2040 Tx: 31 651 epo nl Fax: +31 70 340 - 3016		Authorized Officer Godot, T Telephone No. +31 70 340-3319 		

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**INTERNATIONAL PRELIMINARY REPORT
ON PATENTABILITY**

International application No.
PCT/NL2004/000485

Box No. I Basis of the report

1. With regard to the **language**, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.
- ☐ This report is based on translations from the original language into the following language , which is the language of a translation furnished for the purposes of:
- ☐ international search (under Rules 12.3 and 23.1(b))
 - ☐ publication of the international application (under Rule 12.4)
 - ☐ international preliminary examination (under Rules 55.2 and/or 55.3)
2. With regard to the **elements*** of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:

Description, Pages

1-8 as originally filed

Claims, Numbers

1-14 received on 23.02.2005 with letter of 22.02.2005

Drawings, Sheets

1/3-3/3 as originally filed

- ☐ a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing
3. ☐ The amendments have resulted in the cancellation of:
- ☐ the description, pages
 - ☐ the claims, Nos.
 - ☐ the drawings, sheets/figs
 - ☐ the sequence listing *(specify)*:
 - ☐ any table(s) related to sequence listing *(specify)*:
4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).
- ☐ the description, pages
 - ☐ the claims, Nos.
 - ☐ the drawings, sheets/figs
 - ☐ the sequence listing *(specify)*:
 - ☐ any table(s) related to sequence listing *(specify)*:

* If item 4 applies, some or all of these sheets may be marked "superseded."

**INTERNATIONAL PRELIMINARY REPORT
ON PATENTABILITY**

International application No.
PCT/NL2004/000485

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	1-14
	No: Claims	
Inventive step (IS)	Yes: Claims	1-14
	No: Claims	
Industrial applicability (IA)	Yes: Claims	1-14
	No: Claims	

2. Citations and explanations (Rule 70.7):

see separate sheet

Box No. VII Certain defects in the international application

The following defects in the form or contents of the international application have been noted:

see separate sheet

Box No. VIII Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

see separate sheet

Re Item V

Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Reference is made to the following documents:

D1: US-A-4 422 515 (LOVELESS JOHN H) 27 December 1983 (1983-12-27)

D3: EP-A-0 861 648 (BOCK ORTHOPAED IND) 2 September 1998 (1998-09-02)

2. The document D3 is regarded as being the closest prior art to the subject-matter of claim 1, and shows (see column 4, line 13 to column 5, line 34; the references in parentheses applying to this document):

A wheelchair, comprising:

- an assembly of a chair unit for a user and a support base (3) supporting the chair unit, wherein the support base (3) is provided with a number of carrying wheels (1) for carrying the assembly,
- drive means (9,10,11,12,14) connected to the assembly for driving at least one carrying wheel (1), said drive means (9,10,11,12,14) being provided with at least one motor unit (11,12,14) coupled to a carrying wheel (1), said motor unit (11,12,14) at least substantially being arranged in a hub of a carrying wheel (1) for driving, and
- operating means (7) for operating the drive means (9,10,11,12,14) which are positioned at least partially laterally relative to the chair unit.

The subject-matter of claim 1 differs from this known wheelchair in that the operating means are connected to a wheel shaft, *connected to said motor unit received in said hub so that the operation means do not co-rotate with said carrying wheel* (see clarity objections of ITEM VIII for the wording in italic).

The subject-matter of claim 1 is therefore new (Article 33(2) PCT).

The problem to be solved by the present invention may be regarded as to select a new position for the connection of the operating means.

The solution to this problem proposed in claim 1 of the present application is considered as involving an inventive step (Article 33(3) PCT) because in the prior art it

is neither disclosed nor hinted upon. The wheelchair of document D1 does not have a motor unit positioned in a hub and its hand rim rotates with the wheel.

Claims 2 to 14 are dependent on claim 1 and as such also meet the requirements of the PCT with respect to novelty and inventive step.

Re Item VII

Certain defects in the international application

- The embodiments of figures 1 and 2 and their corresponding descriptions do not fall within the scope of the present claims.
- Independent claim 1 is not in the two-part form in accordance with Rule 6.3(b) PCT, which in the present case would be appropriate, with those features known in combination from the prior art (document D1) being placed in the preamble (Rule 6.3(b)(I) PCT) and with the remaining features being included in the characterising part (Rule 6.3(b)(ii) PCT).
- The features of the claims are not provided with reference signs placed in parentheses (Rule 6.2(b) PCT).

Re Item VIII

Certain observations on the international application

Contrary to Article 6 PCT, there is inconsistency between the description (page 4, lines 12 to 20 and page 5, lines 30 to 33) and claim 1, concerning the position of the connection of the operating means. According to the description, the operating means is connected to a wheel shaft connected to said motor unit received in said hub so that the operation means do not co-rotate with said carrying wheel.

Claims

EPO - DG 1

23. 02. 2005

1. Wheelchair, comprising:
 - an assembly of a chair unit for a user and a support base supporting the chair unit, wherein the support base is provided with a number of carrying wheels for carrying the assembly,
 - drive means connected to the assembly for driving at least one carrying wheel, said drive means being provided with at least one motor unit coupled to a carrying wheel, said motor unit at least substantially being arranged in a hub of a carrying wheel for driving, and
 - operating means for operating the drive means, characterized in that the operating means are positioned at least partially laterally relative to the chair unit, and that the operating means are connected to a wheel shaft received in a hub of at least one carrying wheel.
2. Wheelchair as claimed in claim 1, characterized in that the operating means comprise at least one operating member for the user, wherein the operating member is positioned at least partially laterally relative to the chair unit.
3. Wheelchair as claimed in claim 2, characterized in that the operating means comprise two operating members positioned on either side of the chair unit.
4. Wheelchair as claimed in claim 2 or 3, characterized in that the operating member is adapted to undergo at least one change in orientation.
5. Wheelchair as claimed in claim 4, characterized in that the operating member is adapted to undergo a first change in orientation for regulating the displacement speed of the wheelchair, and a second change in orientation for manoeuvring of the wheelchair.
6. Wheelchair as claimed in claim 4 or 5, characterized in that the operating member is displaceable between at least two extreme positions.

7. Wheelchair as claimed in any of the claims 4-6, characterized in that the operating member takes an at least substantially tubular form and is axially rotatable through a determined angle of rotation.

5 8. Wheelchair as claimed in any of the claims 4-7, characterized in that the operating means comprise at least one sensor connected to the assembly for sensing the change in orientation of the operating member.

9. Wheelchair as claimed in any of the foregoing claims, characterized in that the
10 operating means are adapted for wireless communication with the drive means.

10. Wheelchair as claimed in claim 2, and any of the claims 1, 3-9, characterized in that the drive means are adapted for independent driving of a plurality of carrying wheels, wherein the operating members are each adapted to control a determined driven
15 carrying wheel.

11. Wheelchair as claimed in any of the foregoing claims, characterized in that at least a part of the operating means is positioned on a side of at least one carrying wheel remote from the chair unit.
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12. Wheelchair as claimed in any of the foregoing claims, characterized in that the operating means can be locked in at least one position.

13. Wheelchair as claimed in any of the foregoing claims, characterized in that the
25 operating means are releasably connected to the assembly.

14. Operating means for use in a wheelchair as claimed in any of the claims 1-13.